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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,757	03/10/2005	Christian Schott	6305-0010WOUS	3200

35301 7590 02/09/2007
MCCORMICK, PAULDING & HUBER LLP
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HARTFORD, CT 06103

EXAMINER

CHIU, TSZ K

ART UNIT	PAPER NUMBER
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2822

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/527,757

Applicant(s)

SCHOTT ET AL.

Examiner

Tsz K. Chiu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/10/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), 'by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12-26 are rejected under 35 U.S.C. 102(e) as being anticipated by
Popovic et al. (4829352)

The applied reference has a common inventor with the instant application.
Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With respect to claim 12, Popovic discloses a Hall element (Figure 6) that has two inner and two outer contacts (9,10, 8 and 11, For example Fig. 6) arranged along a straight line, wherein the two inner contacts (9 and 10, For example Fig. 6) are the same width and wherein the two outer contacts (8 and 11, For example Fig. 6) are the same width, wherein the contacts are arranged on a surface of a well (2,3, For example Fig. 6) of a first conductivity type that is embedded in a substrate of a second

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conductivity type and wherein the two outer contacts (8 and 11, For example Fig. 6) are connected by a resistor (internal resistor when connected the electrode a2 and c2 , For example Fig. 6).

With respect to claim 13, Popovic discloses wherein the resistor (internal resistor when connected the electrode a2 and c2 , For example Fig. 6) is formed by a well (2,3, For example Fig. 6) of the first conductivity type.

With respect to claim 14, Popovic discloses wherein the resistor is formed in the well (2,3, For example Fig. 6) of the Hall element (Figure 6) and has a contact arranged next to one of the two outer contacts (8 and 11, For example Fig. 6) of the Hall element (Figure 6) on a side facing an adjacent edge of the well (2,3, For example Fig. 6) .

With respect to claim 15, Popovic discloses wherein the resistor is formed in the well (2,3, For example Fig. 6) of the Hall element (Figure 6) and has two contacts that are each arranged next to one of the outer contacts of the Hall element (Figure 6) on a side facing an adjacent edge of the well (2,3, For example Fig. 6), the two contacts of the resistor being connected via a conductor path.

With respect to claim 16-19, Popovic discloses wherein at least one electrode (a2, For example Fig. 6) electrically insulated from the well (2,3, For example Fig. 6) is arranged between two contacts.

With respect to claim 20, Popovic discloses wherein the contacts are arranged on a surface of a well (2,3, For example Fig. 6) of a first conductivity type that is embedded in the substrate of the second conductivity type and wherein a doping of the well (2,3, For example Fig. 6) in an area between the two inner contacts (9 and 10, For

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example Fig. 6) is different to a doping of the well (2,3, For example Fig. 6) in the areas between an inner contact and an outer contact (9,10, 8 and 11, For example Fig. 6).

With respect to claim 21, Popovic discloses wherein the contacts are arranged on a surface of a well (2,3, For example Fig. 6) of a first conductivity type that is embedded in the substrate of the second conductivity type and wherein a doping of the well (2,3, For example Fig. 6) in an area between the two inner contacts (9 and 10, For example Fig. 6) is different to a doping of the well (2,3, For example Fig. 6) in the areas between an inner contact and an outer contact (9,10, 8 and 11, For example Fig. 6).

With respect to claim 22, Popovic discloses wherein the contacts are arranged on a surface of a well (2,3, For example Fig. 6) of a first conductivity type that is embedded in the substrate of the second conductivity type and wherein a doping of the well (2,3, For example Fig. 6) in an area between the two inner contacts (9 and 10, For example Fig. 6) is different to a doping of the well (2,3, For example Fig. 6) in the areas between an inner contact and an outer contact (9,10, 8 and 11, For example Fig. 6).

With respect to claim 23, Popovic discloses wherein the contacts are arranged on a surface of a well (2,3, For example Fig. 6) of a first conductivity type that is embedded in the substrate of the second conductivity type and wherein a doping of the well (2,3, For example Fig. 6) in an area between the two inner contacts (9 and 10, For example Fig. 6) is different to a doping of the well (2,3, For example Fig. 6) in the areas between an inner contact and an outer contact (9,10, 8 and 11, For example Fig. 6).

With respect to claim 24, Popovic discloses a Hall element (Figure 6) that has two inner and two outer contacts (8 and 11, For example Fig. 6) arranged along a

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straight line, wherein the two inner contacts (9 and 10, For example Fig. 6) are the same width and wherein the two outer contacts (8 and 11, For example Fig. 6) are the same width, wherein the contacts are arranged on a surface of a well (2,3, For example Fig. 6) of a first conductivity type that is embedded in a substrate of a second conductivity type and wherein at least one electrode (a2, For example Fig. 6) electrically insulated from the well (2,3, For example Fig. 6) is arranged between two contacts (9,10, 8 and 11, For example Fig. 6).

With respect to claim 25, Popovic discloses a Hall element (Figure 6) that has two inner and two outer contacts (8 and 11, For example Fig. 6) arranged along a straight line, wherein the two inner contacts (9 and 10, For example Fig. 6) are the same width and wherein the two outer contacts (8 and 11, For example Fig. 6) are the same width, wherein the contacts are arranged on a surface of a well (2,3, For example Fig. 6) of a first conductivity type that is embedded in a substrate of a second conductivity type and wherein a doping of the well (2,3, For example Fig. 6) in an area between the two inner contacts (9 and 10, For example Fig. 6) is different to a doping of the well (2,3, For example Fig. 6) in the areas between an inner contact and an outer contact (9,10, 8 and 11, For example Fig. 6).

With respect to claim 26, Popovic discloses a first Hall element (Figure 6) and a second Hall element (Figure 6) that each have two inner and two outer contacts (8 and 11, For example Fig. 6) arranged along a straight line, wherein the two inner contacts (9 and 10, For example Fig. 6) are the same width and wherein the two outer contacts (8 and 11, For example Fig. 6) are the same width, wherein the contacts of the first Hall

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element (Figure 6) are arranged on a surface of a first well (2,3, For example Fig. 6) of a first conductivity type that is embedded in a substrate of a second conductivity type, wherein the two outer contacts (8 and 11, For example Fig. 6) of the first Hall element (Figure 6) are connected via a first resistor, wherein the contacts of the second Hall element (Figure 6) are arranged on a surface of a second well (2,3, For example Fig. 6) of the first conductivity type that is embedded in the substrate, wherein the two outer contacts (8 and 11, For example Fig. 6) of the second Hall element (Figure 6) are connected via a second resistor, wherein the straight lines of both Hall element (Figure 6) run in parallel and wherein the contacts of the two Hall element (Figure 6) are wired via conductor paths in such a way that the Hall voltages of the two Hall element (Figure 6) are equidirectional.

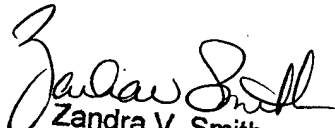
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tsz K. Chiu whose telephone number is 517-272-8656. The examiner can normally be reached on 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra V. Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC
February 4, 2007


Zandra V. Smith
Supervisory Patent Examiner
5 Feb 2006